with simplicity of description, and its appearance is most gratifying to those interested in the Pacific coast flora. It is earnestly hoped that the work may continue to completion.—J. M. Greenman.

NOTES FOR STUDENTS

Current taxonomic literature.—J. C. ARTHUR (Mycologia 1:225-256. 1909) under the title "Cultures in Uredineae in 1908" has published new species in Puccinia and Gymnosporangium; this article is the ninth in a series of reports on the culture of plant rusts.—O. BECCARI (Leafl. Philipp. Bot. 2:639-650. 1909) in an article entitled "New or little known Philippine palms" describes four new species.—V. F. Brotherus (ibid. 651-658) has published 11 new species of mosses from the Philippine Islands.—C. Bernard (Dept. Agr. Ind. Néerland. pp. 1-94. pls. 1-6. 1909) in a paper entitled "Sur quelques algues unicellulaires d'eau douce récoltées le Domaine Malais" has described several new species and varieties of unicellular algae and proposes a new genus (Spinoclosterium).—R. C. Benedict (Bull. Torr. Bot. Club 36:463-476. 1909) presents a provisional revision of the genus Ceratopteris and includes one new species (C. deltoidea) from Jamaica.—B. T. Butler (ibid. 421-440) gives a synopsis of the west American birches in which 17 species are recognized, 7 being indicated as new; a key precedes the characterization of species.—L. Clark (ibid. 299-307. pl. 20) under the title "Some noteworthy Hepaticae from the state of Washington" includes a new species of Jungermannia and a new variety of Scapania paludosa C. Müll. Frib.-W. W. EGGLESTON (ibid. 501-514) in an article entitled "The Crataegi of Mexico and Central America" describes 4 new species and 2 new varieties.—H. D. House (ibid. 595-603) in continuation of his studies in the Convolvulaceae gives a synoptical revision of the genus Quamoclit in which 8 species are recognized, one being new to science.—R. H. Howe, Jr. (ibid. 309-326. pls. 21-23) presents an interesting article dealing with the genus Usnea as represented in New England. The text is supplemented by maps showing the distribution of species and forms occurring in that section.—E. A. McGregor (ibid. 605-609) describes and illustrates two new spermatophytes from California. -K. K. MACKENZIE (ibid. 477-484) in continuation of his studies in the genus Carex has described 8 new North American species.—E. L. Morris (ibid. 515-530) in a third paper on "North American Plantaginaceae" treats in detail several technical species and proposes two new specific names.—P. A. RYDBERG (ibid. 531-541) under "Studies on the Rocky Mountain flora XIX" describes several new species of Gramineae.—R. E. Stone (ibid. 549-552) describes a new species of Puccinia which was found growing on Rynchospora corniculata (Lam.) Gray at Auburn, Alabama.—C. H. Peck (ibid. 329-339) describes 22 new species of fungi from different parts of the United States; the same author (N. Y. State Mus. Bull. 131. pp. 18-58. 1909) describes new species of American fungi, several being illustrated.—Q. Borge (Arkiv för Botanik 8: no. 13. pp. 29. pl. 1. 1909) under the title "Nordamerikanische Süsswasseralgen" describes and illus-

trates a new species of Closterium and a new variety of Cosmarium cuneatum from Florida, aso a new species of Anabaena from Lower California.-R. E. FRIES (ibid. no. 8. pp. 51. pls. 1, 2) has published 6 new species of flowering plants collected along the boundary between Bolivia and Argentina; the same author (ibid. no. 11. pp. 34. pls. 1-4) describes and illustrates several new Gasteromycetes from the same region.—G. O. MALME (ibid. no. 1. pp. 30. pl. 1) presents a synoptical revision of the South American genera Araujia and Morremia and describes a new species in the latter genus.—N. Sylven (ibid. no. 6. pp. 48. pls. 1-7) gives an account of the South American species of Genlisea and Utricularia, based on material in the Regnell herbarium. Four species of the former genus are recorded, of which one from Minas Geraës is new; and in Utricularia 34 species are recorded, 9 of which are new to science.—E. WAINIO (ibid. no. 4. pp. 175) under the title "Lichenes in viciniis hibernae expeditionis Vegae prope pagum Pitlekai in Siberia septentrionali a D:re E. Almquist collecti" has published several new species belonging to different genera and proposes a new genus (Melanaspicilia) to which six species are referred.-N. L. Britton (Torreya 9:153-160. 1909) gives an account of the genus "Rhipsalis in the West Indies," recording three species, one of which (R. jamaicensis) is new.—T. D. A. Cockerell (ibid. 166, 167) proposes a new generic name (Wedeliella) for a certain group of nyctaginaceous plants; the type of the genus is Allionia incarnata L.-G. V. NASH (ibid. 209, 210) records a new species of Danthonia from Jamaica.— H. CHRIST (Bull. Acad. Int. Geo. Bot. 18:146-178. 1909) under the title "Fougères d'extrême Orient" has published several new species of ferns from Korea, Sachalin, and China.—H. Léveillé (ibid. 1-138) presents a synopsis of the Chinese and Japanese species of Rubus; the author recognizes 143 species for China and 48 for Japan. The descriptions of species are preceded by a determinative key, of which the character of the leaves and the presence or absence of spines form the primary basis for division.—E. VANIOT and H. LÉVEILLÉ (ibid. 139-145) have published 18 new species of Compositae from Korea, 12 of which belong to the genus Aster.—C. Christensen (Smiths. Misc. Coll. 52:365-396. 1909) in an article entitled "The American ferns of the group of Dryopteris opposita contained in the U.S. National Museum" presents critical notes on several species and publishes 9 species and 3 varieties of this genus as new to science.—F. FEDDE (Rep. Nov. Sp. 7:255-257. 1909) describes 4 new varieties of Papaver nudicaule L., 3 of these being from the Rocky Mountain region.—A. LINGELSHEIM, F. PAX. and H. Winkler (ibid. 241-251) in continuation of their studies on the Bolivian flora have published 22 new species of dicotyledonous plants.—K. Wolff (ibid. 274-279) under the title "Species novae generis Eryngii Americae centralis et australis" has published 6 species new to science.—E. L. Greene (ibid. 252-255) describes 8 new species of Thalictrum, chiefly from western North America; the same author (Midland Naturalist 1:99-104. 1909) has published 3 new species of Thalictrum from North Dakota.—A. A. HELLER (Muhlenbergia 5:133-143. 1909) publishes the first of a series of articles on the "Nevada lupines"; the

sections Lupinellus and Platycarpos are here treated, and one new species is proposed.—E. Gilg and R. Muschler (Bot. Jahrb. 42:437-487. 1909) in an article entitled "Aufzählung aller zur Zeit bekannten südamerikanischen Cruciferen" have published 19 new species and have made several new combinations. The following new genera are proposed: Sarcodraba (1 species), based on Draba karraikensis Speg.; Aschersoniodoxa (2 species), based on Draba Mandoniana Wedd.; Weberbauera (1 species), based on Braya densiflora Musch.; and Brayopsis (9 species), based on Eudema grandiflora Planch.—W. HERTER (Allg. Bot. Zeits. 15:129. 1909) has published a new species of Ibatia from Uruguay.—J. HUBER (Bull. Soc. Bot. Genève II. 1:245-249. 1909) describes and illustrates two new species of Ericaceae from the plains of the Amazon.-L. KRAUTER (Contr. Bot. Lab. Univ. Penn. 3:93-206. 1908) gives a synoptical revision of the genus Pentstemon, recognizing 148 species and numerous varieties.—R. E. KUNZE (Monats. Kakteenk. 19:149, 150. 1909) describes and illustrates a new species of Echinocactus (E. arizonicus) from Arizona.—J. A. Purpus (ibid. 133, 134) describes a new species of Opuntia from Utah; the description is accompanied by an illustration.—L. Quehl (ibid. 155, 156) has published a new species of Mamillaria (M. ceratites) from Mexico.—W. Weingart (ibid. 150-155) publishes a new species of Cereus (C. Purpusii) which is indigenous to western Mexico. R. G. LEAVITT (Phil. Journ. Sci. Botany 4:201-245. 1909) under the title "The genus Eria in the Philippine Islands" recognizes 40 species, 13 being described for the first time. A synoptical treatment with several text figures follows the Latin diagnoses of species.—E. D. MERRILL (ibid. 247-330) in continuation of his studies on the flora of the Philippines has pubished 83 new species of flowering plants and proposes the following new genera: Embolanthera of the Hamamelidaceae, Everettiodendron of the Euphorbiaceae, Ahernia of the Flacourtiaceae, and Greeniopsis of the Rubiaceae.—C. B. Robinson (ibid. 331-407) gives a "Preliminary revision of the Philippine Myrtaceae." Of the 10 genera recognized 7 are monotypic, 2 contain 2 species each, and one, Eugenia, is represented by 98 species, of which 62 are described as new to science.—C. F. MILLSPAUGH (Field Col. Mus. Bot. Ser. 2:289-321. 1909) in continuation of his studies on the flora of the Bahamas has published 12 new species of dicotyledonous plants, proposes a new genus (Euphorbiodendron) of the Euphorbiaceae, and makes several new combinations.—A. Pascher (Oesterr. Bot. Zeitschr. 59:329-331. 1909) has published a new genus (Atropanthe) of the Solanaceae from China. -A. ZAHLBRUCKNER (ibid. 349-354) in pursuance of his studies on the lichen flora of Dalmatia describes several new species and characterizes a new genus (Agonimia), based on Polyblastis tristicula Th. Fr.; the same author (Ann. Mycol. 7:472-478. 1909) under the title "Neue Flechten V" has published several new species of lichens of which 4 species and one variety are from Florida and Arizona.-R. A. ROLFE (Kew. Bull. 268-277. 1909) gives a "Revision of the genus Cycnoches," enumerating 16 species mostly native in Central and South America.-T. A. SPRAGUE (ibid. 264) describes a new species of Phyllanthus from Mexico.— J. M. GREENMAN.